

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method of recognizing an image of a nozzle hole, comprising:
picturing a nozzle hole of a liquid droplet ejection head in a state of being filled with a function liquid to thereby perform image recognition thereof,
wherein the nozzle hole is pictured synchronously with application of a driving waveform to the liquid droplet ejection head, the driving waveform causing single-period micromotion of a meniscus surface of the nozzle hole; and
wherein the picturing is only performed at a timing in which the meniscus surface is pulled into an inside of the nozzle hole due to the driving waveform.

2. (Cancelled)

3. (Original) The method of recognizing an image of a nozzle hole according to claim 1, wherein the picturing is performed by causing a strobe to emit light to the nozzle hole.

4. (Original) A method of correcting a position of a liquid droplet ejection head, comprising:

the step of recognizing an image of a position of a nozzle hole of a liquid droplet ejection head by using the method of recognizing an image of a nozzle hole according to claim 1; and

the step of correcting positional data of the liquid droplet ejection head based on a result of recognition in the recognizing step.

5. (Currently Amended) A method of inspecting a nozzle hole comprising:
picturing a nozzle hole of a liquid droplet ejection head in a state of being filled with a function liquid to thereby check a presence or absence of ~~a~~-foreign matter adhered thereto,

wherein the nozzle hole is only pictured at a timing when a driving waveform is applied to the liquid droplet ejection head, ~~the driving waveform being such that~~ and a meniscus surface of the nozzle hole is pulled inside.

6. (Original) The method of inspecting a nozzle hole according to claim 5, wherein the liquid droplet ejection head has a plurality of the nozzle heads, the method further comprising:

the step of ejecting, for inspection, a function liquid from all of nozzle holes of the liquid droplet ejection head toward an inspection area;

the step of determining a defective nozzle for determining a nozzle hole with poor ejection, based on a result of ejection in the inspection area,

wherein, after the step of determining the defective nozzle, the nozzle hole with poor ejection is pictured as a nozzle hole to be made an object of inspection, by applying the driving waveform to the liquid droplet ejection head.

7-13. (Cancelled)